LAKE: NORTH L (VLMP SCW)

TOWN: ORIENT

COUNTY: AROOSTOOK

MIDAS: 1063 1 TRUE BASIN: SAMPLE STATION:

TRUE BASIN CHARACTERISTICS

SURFACE AREA: 392.8 ha. (970.6 a.)

FLUSHING RATE: 7.31 flushes/yr.

VOLUME: 11785500.0 cu. m. (9560 ac.-ft.)

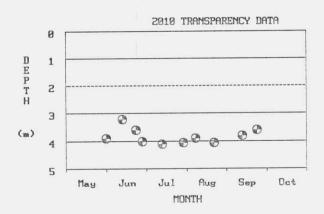
DIRECT DRAINAGE AREA: 150.22 sq. km. (58.00 sq. mi.)

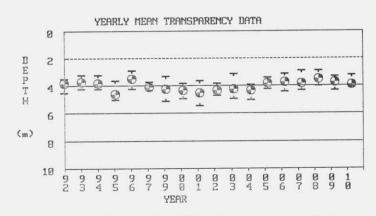
WHOLE LAKE INFORMATION MAX. DEPTH: 14 m. (45 ft.) MEAN DEPTH: 5 m. (16 ft.) DELORME ATLAS #: 53 USGS QUAD: ORIENT IFW REGION F: Penobscot (Enfield)

IFW FISH. MANAGMENT: Warmwater & Coldwater

PLEASE NOTE THE FOLLOWING: The SAMPLE STATION # refers to the location sampled. The term TRUE BASIN is used to define areas within a lake that are separated by shallow reefs or shoals and therefore function as separate lakes. There are approximately 50 lakes in the state that have more than 1 True Basin. True Basin Characteristics are now being included in the first section of these reports to enable users of the Phosphorous Loading Methodology to better evaluate the data. If there is no data for a particular True Basin, True Basin Characteristics must be obtained from the DEP. NORTH L has 1 True Basin(s).

SECCHI DISK TRANSPARENCY GRAPHS:





Note: 2010 graphs may indicate multiple readings taken on a given day.

SUMMARY OF CHEMICAL AND TROPHIC STATE PARAMETERS:

[* indicates that Secchi disk was visable at bottom of lake (or one reading used in calculation was visable)].

	MEAN MEAN	MEAN ALK	MEAN COND.	TOTAL	PHOS.	MEANS	(dqq)	SECCHI	DISK	(m.)		CHLORO	PHYLL	A(ppb)	TROP	HIC ST	ATE IN	DICES
	(SPU)	(mg/l)	(uS	EPI	SURF	BOT.	PRO.	8-11							EPI	PHOS		
YEAR			/cm)	CORE	GRAB	GRAB	GRAB	MIN.	MEAN	MAX.	N	MIN.	MEAN	MAX.	<u>C</u>	<u>G</u>	SEC	CHL
1992	U)7 : EN(7)2	area =	17,00		e 76.		-	3.5	3.8	4.5	6	- 100	1117	5 1.11		- "	-	-
1993	-	-	-	-	-	-	-	3.2	3.7	4.2	4	-	-	-		-	-	-
1994		-	100	-	-	-	-	3.2	3.8	4.2	5	- 1	-	-	- 1	-	, 1 mm	-
1995		-	-	-	-	-	-	3.6	4.6	5.0	4	_	-	-	-	-	-	-
1996	55	- ,	-	-	-	-	-	2.9	3.5	4.2	5	-	-	-	-	-	-	***
1997	_ 100 to	E II 301 - 081	-	-	-	-	-	3.7	4.1	4.3	5	-	-	-	-	-	-	-
1999			-	_	-	-	-	3.3	4.2	5.1	5	-	-	-	-	-	-	-
2000		-	_	_	_	11-1	-	3.8	4.3	4.9	4	_	-	s = +	207	-	-	-
2001	Tetrace A	_	-	_	-	-	-	3.6	4.5	5.4	4	i i	-	-	-	- ,	-	-
2002	1630 700	_	-	-	-	_	-	3.8	4.3	4.7	4	-	-	-	-	-	-	-
2003	70 80750	- 12	-	-	-	-	-	3.1	4.2	4.9	4	-	12	-	-	-	-	-
2004	- DOW - 1 E	_	-	-	-	-	-	3.9	4.3	5.0	4	-	-	-	-	-	_	-
2005		_	_	-	-	-	-	3.4	3.8	4.2	4		-	-	-	-	-	-
2006	49 7.36	17.4	45	9	_	_	-	3.1	3.7*	4.4	5		-		-	-	-	-
2007	5.5	-	-	-	-	-	-	2.9*	3.8*	4.3	5		-	-		-	-	-

LAKE: NORTH L (VLMP SCW)

TOWN: ORIENT

COUNTY: AROOSTOOK

MIDAS: 1063 *TRUE BASIN: 1

*SAMPLE STATION: 1

SUMMARY OF CHEMICAL AND TROPHIC STATE PARAMETERS:

	MEAN	MEAN	MEAN	MEAN															
	COLOR	pН	ALK	COND.	TOTAL	PHOS.	MEANS ((dqq)	SECCH:	I DISK	(m.)		CHLOR	DPHYLL	A(ppb)	TROP	HIC ST	ATE IN	DICES
	(SPU)		(mg/l)	(us	EPI	SURF	BOT.	PRO.								EPI	PHOS		
YEAR				<u>/cm</u>)	CORE	GRAB	GRAB	GRAB	MIN.	MEAN	MAX.	<u>N</u>	MIN.	MEAN	MAX.	<u>C</u>	G	SEC	CHL
2008	-	-	-	-	-	-	-	-	2.9	3.5*	4.0	5	-	-	77.	-	-	-	-
2009	-	-	-	-	-	-	-	-	3.3*	3.7*	4.3	5		-	-	-	-	-	-
2010	-	-	-	-		-	-	-	3.2	3.9*	4.1	5	-	-	-	-	-	-	1 -
SUMMARY:	52	7.36	17.4	45	9	+3	-	-	2.9*	4.0*	5.4	18	-	-	-	-	-	-	

LATE SUMMER TEMPERATURE / DISSOLVED OXYGEN PROFILES:

	SAMPLE	DATE
DEPTH	08/24	/06
m	°C_	ppm
0.0	20.5	8.6
1.0	20.4	8.6
2.0	20.4	8.5
3.0	20.1	8.3
4.0	19.8	8.1
5.0	19.5	7.9
6.0	19.5	7.9
7.0	19.4	7 - 8

WATER QUALITY SUMMARY

NORTH POND, Orient

Midas: 1063, Station: 01 (U.S. side)

The Maine Department of Environmental Protection (ME-DEP) and the Volunteer Lake Monitoring Program (VLMP) have collaborated in the collection of lake data to evaluate water quality, track algal blooms, and determine water quality trends. This dataset does not include bacteria, mercury, or nutrients other than phosphorus.

Water quality monitoring data for North Pond has been collected since 1992. During this period, basic chemical information was collected one year in addition to Secchi Disk Transparencies (SDT). In summary, the water quality of North Pond to be appears to be average, based on measures of SDT and Total Phosphorus (TP). The potential for nuisance algal blooms on North Pond is moderate.

Water Quality Measures: North Pond is a moderately colored lake (average color 49 SPU) with an average SDT of 4.1 (13.4ft). Some SDT readings hit the bottom of the lake and are thus an underestimate of water quality. The one TP reading available from this station was 9 parts per billion (ppb). The one dissolved oxygen (DO) profile that has been collected from this station does not indicate any DO depletion at that sampling station; because no profiles have been collected from the deepest spot, it is impossible to speculate whether or not phosphorus release from sediments is of concern or if there has been habitat loss for coldwater fish species.

See ME-DEP Explanation of Lake Water Quality Monitoring Report for measured variable explanations. Additional lake information can be found on the Internet at http://www.lakesofmaine.org/ and/or http://www.maine.gov/dep/blwq/lake.htm, or telephone the ME-DEP at 207-287-3901 or the VLMP at 207-783-7733.

Filename: Nort1063 01, Revised: 12/06, By: lb

LAKE: NORTH L (VLMP SCW)

TOWN: ORIENT

COUNTY: AROOSTOOK

MIDAS: 1063
TRUE BASIN: 1
SAMPLE STATION: 2

TRUE BASIN CHARACTERISTICS

SURFACE AREA: 392.8 ha. (970.6 a.)

FLUSHING RATE: 7.31 flushes/yr.

VOLUME: 11785500.0 cu. m. (9560 ac.-ft.)

DIRECT DRAINAGE AREA: 150.22 sq. km. (58.00 sq. mi.)

WHOLE LAKE INFORMATION

MAX. DEPTH: 14 m. (45 ft.)

MEAN DEPTH: 5 m. (16 ft.)

DELORME ATLAS #: 53

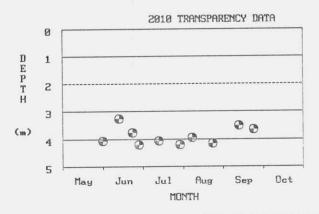
USGS QUAD: ORIENT

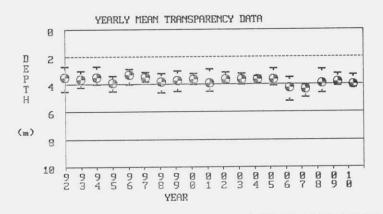
IFW REGION F: Penobscot (Enfield)

IFW FISH. MANAGMENT: Warmwater & Coldwater

PLEASE NOTE THE FOLLOWING: The SAMPLE STATION # refers to the location sampled. The term TRUE BASIN is used to define areas within a lake that are separated by shallow reefs or shoals and therefore function as separate lakes. There are approximately 50 lakes in the state that have more than 1 True Basin. True Basin Characteristics are now being included in the first section of these reports to enable users of the Phosphorous Loading Methodology to better evaluate the data. If there is no data for a particular True Basin, True Basin Characteristics must be obtained from the DEP. NORTH L has 1 True Basin(s).

SECCHI DISK TRANSPARENCY GRAPHS:





Note: 2010 graphs may indicate multiple readings taken on a given day.

SUMMARY OF CHEMICAL AND TROPHIC STATE PARAMETERS:

[* indicates that Secchi disk was visable at bottom of lake (or one reading used in calculation was visable)].

	MEAN	MEAN	MEAN	MEAN															
	COLOR	pН	ALK	COND.	TOTAL	PHOS.	MEANS	(dad)	SECCH1	DISK	(m.)		CHLOR	OPHYLL	A(ppb)	TROP	HIC ST	ATE IN	DICES
	(SPU)	-	(mg/l)	(us	EPI	SURF	BOT.	PRO.								EPI	PHOS		
YEAR	*			/cm)	CORE	GRAB	GRAB	GRAB	MIN.	MEAN	MAX.	N	MIN.	MEAN	MAX.	C	<u>G</u>	SEC	CHL
1992	ar Eu	10 m		-	-		_	-	2.7*	3.5*	4.5	6	-	-	- ,	-	-		-
1993	40 10 5	30'0 Y	_	-	_	_		_	3.0*	3.6*	4.2	4	-	_	-	-	-	-	-
1994		1.73	4.7	-	_	_	-	-	2.7	3.5*	4.0	5	-	-	-	-	_	-	-
1995		1	8 5	_	_	_	-	-	3.4	3.9*	4.5	4	-	-	-	_	-	_	-
1996	_	_	_	_	_	_	_	_	2.9*	3.3*	4.0	5	-	-	-	-	-	-	-
1997	_ 149	14 5	8 <u> </u>	2	_	_		_	3.1	3.5*	3.8*	5	-	-	-	-	-	-	-
1998	_ "		×	_	_	_	_	_	3.2	3.8	4.6	5	-	-	-	-	-	-	-
1999		to New	for the l		_	_	_	_	3.0	3.7	4.5	5	_	_	-	_	-	_	-
			i Nimii a	d _	_		_	_	3.2	3.6*		4	-	-	_	_	-	_	_
2000		1 1	n tuik					_	2.9*			4		_	- 1	_	_	_	_
2001				_	7-6	-	_	_										-	100
2002	- 10		-	-	-	-	-	-	3.1	3.6*		4		-	-	-	-	-	-
2003	-	-	-	-	-	-	-	-	3.2*	3.6*	4.0	4	-	-	-	-	=	-	-
2004	-	-		-		-	-	-	3.4*	3.6*	3.9*	4	-	-		-	-	-	-
2005		-	-	-	-	-		-	2.8	3.6*	4.1	4	-	-	-	-	-	-	-
2006		2	_	-	_	-	-	-	3.5	4.2	5.2	5	-	-	-	-	_	-	-

LAKE: NORTH L (VLMP SCW)
TOWN: ORIENT

COUNTY: AROOSTOOK

MIDAS: 1063

*TRUE BASIN: 1

*SAMPLE STATION: 2

SUMMARY OF CHEMICAL AND TROPHIC STATE PARAMETERS:

	MEAN	MEAN	MEAN	MEAN																
	COLOR	рН	ALK	COND.	TOTAL	PHOS.	MEANS (ppb)	SECCHI DISK (m.)				CHLOR	OPHYLL	A(ppb)	TROPHIC STATE INDICES				
	(SPU)		(mg/1)	(us	EPI	SURF	BOT.	PRO.								EPI	PHOS			
YEAR				<u>/cm</u>)	CORE	GRAB	GRAB	GRAB	MIN.	MEAN	MAX.	N_	MIN.	MEAN	MAX.	<u>c</u>	<u>G</u>	SEC	CHL	
2007	-	_	=	_	-	_	-	-	4.0	4.3	4.9	5		-	-	-	-	-	-	
2008	-	-	-	-	-	-	-	-	2.9	3.9	4.6	5	-	-		-	-	-	-	
2009	-		-	-	-	-	-	-	3.2	3.8	4.1	5	-	-		-		-	-	
2010	-	-	-	-	-	-	-	-	3.3	4.0	4.2	5	-	-		-	-	-	-	
SUMMARY:	_		_	_	_	_	-	-	2.7*	3.7*	5.2	19	-	-	-	-	-	-	-	

WATER QUALITY SUMMARY

NORTH POND, Orient

Midas: 1063, Station: 02 (Canada)

The Maine Department of Environmental Protection (ME-DEP) and the Volunteer Lake Monitoring Program (VLMP) have collaborated in the collection of lake data to evaluate water quality, track algal blooms, and determine water quality trends. This dataset does not include bacteria, mercury, or nutrients other than phosphorus.

Water quality monitoring datasets for North Pond have been collected since 1992. During this period, no basic chemical information has been collected from this station, only Secchi Disk Transparencies (SDT). In summary, the water quality of North Pond to be appears to be average, based on measures of SDT. The potential for nuisance algal blooms on North Pond is moderate.

Water Quality Measures: Data from Station 01 indicate that North Pond is a moderately colored lake (average color 49 SPU). Station 02 on North Pond has an average SDT of 3.7 (12.1ft); some Secchi disk readings hit the bottom of the lake thus causing SDTs to be an underestimate of water quality. The one TP reading available from Station 01 was 9 parts per billion (ppb). The one dissolved oxygen (DO) profile that has been collected, also from Station 01, does not indicate any DO depletion at that sampling station; because no profiles have been collected from the deepest spot, it is impossible to speculate whether or not phosphorus release from sediments is of concern or if there has been habitat loss for coldwater fish species.

See ME-DEP Explanation of Lake Water Quality Monitoring Report for measured variable explanations. Additional lake information can be found on the Internet at http://www.lakesofmaine.org/ and/or http://www.lakesofmaine.org/ and/or http://www.maine.gov/dep/blwq/lake.htm, or telephone the ME-DEP at 207-287-3901 or the VLMP at 207-783-7733.

Filename: Nort1063 02, Revised: 12/06, By: lb